Kansas.—Of general occurrence on the 5th and 4th; Fort Scott, 6th; Topeka, 13th; Independence, 18th.
Kentucky.—Bowling Green, 24th, 29th, 30th; Louisville, 29th, 30th.
Louisiana.—Point Pleasant, 19th, 24th, 25th, 30th, 31st; Port Eads, 13th, 19th, 24th; Shreveport, 19th, 24th, 30th; New Orleans, 24th.
Michigan.—Otisville, 14th; Port Huron, 14th; Lansing, 15th; Alpena, 25th.
Mississippi.—Vicksburg, 25th, 31st; Starkville, 31st.
Missouri.—Archie, 5th; Protem, 6th, 18th; Springfield, 6th; Saint Louis, 13th, 29th.
Nevada.—Pioche, 23d.
New Jersey.—Sandy Hook, 19th; Manasquan, 20th.
New Mexico.—Fort Cummings, 9th; Fort Bayard, 9th; Santa Fé, 11th, 15th, 24th; Fort Union, 12th.
North Carolina.—Of general occurrence in the state on the 19th, 30th, 31st; and were also reported from Life-saving Station No. 6, on the 15th, 16th, 28th; Brevard, 3d; Hatteras, 6th, 15th, 18th, 20th, 26th; Kittyhawk, 15th; Smithville, 20th.
Ohio.—Of general occurrence on the 14th; and at Bethal, 9th; Sandusky, 15th; Cincinnati, 30th.
Oregon.—Albany. 23d.
Pennsylvania.—Williamsport, 15th.
South Carolina.—Stateburg, 19th, 20th, 30th; Charleston, 30th.
Tennessee.—Memphis, 29th, 30th, 31st; Nashville, 29th, 30th, 31st; Chattanooga, 30th, 31st; Murfreesborough, 31st; Knoxville, 31st.
Texas.—They were of general occurrence along the Gulf coast on 13th and 15th; and in northern Texas on 18th, 23d, 24th; and reported Fort McKavett, 16th; Denison, 18th; Fort Elliott, 18th; Palestine, 18th, 19th, 24th, 30th, 31st; Galveston, 19th, 24th.
Utah.—Nephi, 24th.
Virginia.—Chincoteague, 19th; Norfolk, 30th; Wytheville, 30th; Cape Henry, 31st.
Washington.—Spokane Falls, 24th.
West Virginia.—Helvetia, 30th.
Wyoming.—Cheyenne, 29th.

OPTICAL PHENOMENA.

SOLAR HALOS.

Solar halos have been observed in the various districts, on the following dates:—
New England.—1st, 3d, 6th, 8th, 14th, 15th, 17th, 20th, 21st, 24th, 26th, 29th, 30th, 31st.
Middle Atlantic states.—6th, 7th, 8th, 13th, 17th, 21st, 22d, 24th to 27th, 30th 31st.
South Atlantic states.—6th, 19th, 14th, 15th, 17th, 21st, 24th, 25th, 27th, 29th, 30th.
Eastern Gulf.—6th, 10th, 11th, 14th, 16th, 21st, 23d, 27th, 29th, 30th, 31st.
Western Gulf.—3d, 4th, 9th, 11th, 20th, 22d, 23d, 24th, 29th.
Ohio valley and Tennessee.—2d, 4th, 5th, 7th, 16th, 17th, 20th, 24th, 25th, 27th, 28th.
Lower lakes.—5th, 6th, 8th, 12th, 15th, 20th, 23d to 27th, 30th, 31st.
Upper lakes.—2d, 3d, 5th, 7th, 9th, 10th, 12th, 13th, 16th, 17th, 20th, 24th, 25th, 26th, 29th, 30th, 31st.
Extreme northwest.—3d, 13th, 18th, 19th, 20th, 29th, 30th, 31st.
Upper Mississippi valley.—4th, 5th. 7th, 8th, 9th, 12th, 15th, 16th, 20th, 21st, 22d, 24th, 26th, 28th, 29th.
Missouri valley.—1st to 4th, 7th, 9th, 12th, 13th, 15th, 19th, 23d, 24th.
California.—4th, 6th, 9th to 12th, 24th, 25th, 26th.
Solar halos were also observed in the following states and territories not included in the districts named above:
Arizona.—Prescott, 21st, 25th, 29th.
Idaho.—Lewiston, 1st, 7th, 22d, 25th, 31st.
Kansas.—Clay Centre, 19th; Elk Falls, 12th; Yates Centre, 2d, 6th, 7th, 19th, 20th.
Nevada.—Carson City, 22d.
New Mexico.—Santa Fé, 11th.
Oregon.—Roseburg, 10th.
Texas.—Eagle Pass, 30th.
Utah.—Salt Lake City, 3d.
Washington.—Colfax, 23d.

Lansing, Michigan, 2d: at 4 p. m., a solar halo of 22° radius was observed, with two bright parhelia, one above and the other on the left of the sun. There was an arc of a fainter halo of 45° radius on the left of sun. The clouds were cirro-stratus and cirro-cumulus, of bluish gray.

Mr. B. B. Cutter, of Heath, Massachusetts, reports that a remarkable solar halo was observed at that place at 9.30 a. m., of the 26th.

LUNAR HALOS.

Lunar halos have been observed in the various districts on the following dates:
New England.—1st, 14th, 16th, 17th, 19th to 24th.
Middle Atlantic states.—2d, 16th to 26th.
South Atlantic states.—19th, 20th, 24th, 25th.
Eastern Gulf.—13th, 16th, 19th, 23d, 29th.
Western Gulf.—13th to 16th, 20th, 22d, 24th, 25th, 26th.
Ohio valley and Tennessee.—13th, 15th, 16th, 17th, 19th, 22d, 24th, 25th.
Lower lakes.—12th to 17th, 22d, 24th, 25th, 26th, 29th.
Upper lakes.—13th, 14th, 16th, 17th, 19th, 20th, 23d, 24th, 29th.
Extreme northwest.—15th, 16th, 20th, 23d, 24th.
Upper Mississippi valley.—2d, 13th, 14th, 16th to 19th, 21st.
Missouri valley.—7th, 8th, 12th, 13th, 15th, 16th, 18th, 19th, 20th, 23d.
Northern slope.—13th, 14th, 16th, 19th, 21st, 22d.
Southern slope.—1st, 14th, 21st, 22d.
Southern plateau.—2d, 11th, 13th, 14th, 15th, 21st, 26th to 30th.
Middle plateau.—1st, 19th, 21st, 23d, 24th.
Lunar halos were also observed in the following states and territories not included in the districts named above:
California.—Los Angeles, 12th; Visalia, 3d, 19th, 22d, 24th.
Florida.—Cedar Keys, 16th, 18th.
Kansas.—Salina, 18th, 19th; Yates Centre, 19th, 20th, 23d.
Nevada.—Carson City, 21st, 22d; Pioche. 31st.
Oregon.—Portland, 18th.
Texas.—Eagle Pass, 1st.
Utah.—Nephi, 21st; Salt Lake City, 21st, 22d.
Washington.—Bainbridge Island, 13th, 18th, 19th, 21st.

MIRAGE.

Alexandria, Dakota, 11th, 19th.
Pretty Prairie, Kansas, 1st.
Indianola, Texas, 8th, 9th, 16th, 17th, 20th, 21st, 24th, 26th.

MISCELLANEOUS PHENOMENA.

SUN SPOTS.

The following record of sun spots for the month of March, 1883, has been forwarded by Mr. D. P. Todd, Director of the Lawrence Observatory, Amherst, Massachusetts:—

DATE—Mar., 1883.	No. of new		Disappear'd by solar rotation.		Reappear'd by solar rotation.		Total No. visible.		REMARKS.
	Gr'ps	Spots	Gr'ps	Spots	Gr'ps	Spots	Gr'ps	Spots	
1, 4 p. m...	0	0	0	0	0	0	2	6	
2, 9 a. m...	0	0	0	0	0	0	2	5	
3, 9a. m...	0	0	0	0	0	0	1	3	
9, 4 p. m...	4	10	.....	.....	.....	.....	4	10	
15, 11 a. m...	.....	.....	.....	.....	.....	.....	4	12	
16, 11 a. m...	0	5	0	0	0	2	4	17	
17, 11 a. m...	0	5	0	2	0	3	4	20‡	
18, 12 m....	0	3	1	2	0	0	3	20‡	
19, 3 p. m...	0	0	0	0	0	0	3	20‡	
20, 10 a. m...	0	0	1	5	0	0	2	15‡	
21, 9 a. m...	0	5	0	2	0	0	2	20‡	
22, 9a. m...	1	7	1	2	0	0	2	25‡	
23, 11 a. m...	0	5	0	0	0	0	2	30‡	
24, 10 a. m...	0	0	0	0	0	0	2	30‡	
25, 12 m....	0	0	0	0	0	0	2	25‡	
26, 10 a. m...	1	5	0	0	1	5	3	30‡	
28, 7 a. m...	0	5	0	0	0	0	3	25‡	

‡Approximated. Faculæ were seen at the time of every observation.